How to Build Your Habitat Code

• The habitat descriptions are a set of three (3) numbers.
• The major habitats begin with numbers 1-9.
    1) Unvegetated
    2) Developed
    3) Agriculture
    4) Open Water
    5) Wetlands
    6) Non-forest
    7) Deciduous/Hardwood forest
    8) Deciduous/Conifer forest mix
    9) Conifer forest
• The second number is found indented below the major habitat. For example, agriculture (3) that has irrigated fields would be assigned a (1).
• The third number is the next indention. An irrigated agricultural field that has vineyards on it would be labeled (3) agriculture (1) irrigated (3) orchards/vineyards.

Some more examples:
231= Developed (2) light development (3) and residential (1).
A stream surrounded by deciduous trees would be coded 533: wetland (5) riparian (3) and deciduous trees (3).
There are many different possible combinations to identify a habitat using this system.
TIPS:
If you are not sure what code to pick, go backwards and decide what codes you wouldn't select.
Do your best. Many people will look at the same habitat and decide to use different codes. Select the code and stick with it.
Habitats change over time.
Forest codes are difficult for beginners. You may want to just use 700, 800, or 900 for your forest codes.
Habitats (1) unvegetated and (4) Open water have the 2nd and 3rd numbers combined already.

1) Unvegetated
Less than 10 vegetation cover. Excludes agricultural and developed areas, and open water. Refers mostly to large areas of bare rock, saline flats, and permanent snow and ice fields.
    10 - Rock/Talus
    11-Cliff's
    20 - Ice/Snow (permanent)
    30 - Sand (beaches, dunes)
    40 - Bare Soil (found after floods or forest fires)

2) Developed: Significant human influence
Surface development includes buildings, pavement, mining operations, etc. Excludes agricultural land and clear cuts.
    0 - All levels of development from 10-100
    1 - Heavy: >60 surface development / < 40 of vegetation
    2 - Moderate: 30-60 surface development / - 50 vegetation
    3 - Light: 10-30 surface development / > 50 vegetation
        0 - All types of development
        1 - Residential
        2 - Industrial/Business
        3 - Mining operations (i.e. gravel pits or quarries)
        4 - Roads

5 - Grass/Shrub (i.e. cemeteries, golf courses, mowed parks)
6 - Wooded Forests (i.e. forests/parks with mostly natural vegetation surrounded by development)

3) Agricultural

Intensively managed fields. Does not include unmaintained range used as pasture. Hedgerows are important and should be included in the comments.

0 - Irrigated and Non-irrigated fields
1 - Irrigated fields
2 - Non-irrigated fields
    0 - All crop species
    1 - Developed/maintained pasture: seeded and regularly mown pasture.
    2 - Herbaceous row crops
    3 - Orchards/Vineyards
    4 - Conservation Reserves

4) Open Water

00 - All open water
10 - Fresh water
11 - Fresh water lakes
12 - Municipal ponds
13 - Channeled scabland ponds (Eastern Washington)
14 - Sewage ponds
15 - Fresh moving water
17 - Man-made canals
18 - Irrigation ponds
20 - Salt water
30 - Brackish water (partially salty)

5) Wetlands

Vegetated areas where plants are rooted in water or water saturated soil, or that regularly tolerate flooding for extensive time periods.

0 - All wetland types
1 - Estuarine marsh (saltwater)
2 - Freshwater marsh
3 - Riparian (rivers and streams)
4 - Vernal pools (pools which dry up pan of the year)
5 - Ocean beaches (vegetated)
6 - Intermittent streams
    0 - All wetland vegetation types
    1 - Submerged/floating aquatic plants
    2 - Emergent herbs/shrubs
    3 - Trees - deciduous
    4 - Trees – conifer

6) Non-Forested Classes

Grasslands, mountain meadows, unmaintained range, clear cuts, as well as young replanted forests with trees less than 15' tall and have less than 26% canopy cover.
Certain plants are colonizers and are later eliminated as the slower growing climax vegetation become large enough to outgrow the colonizers. The colonizers and young climax vegetation are considered successional. Colonizers appear when there has been a disturbance, such as a. fire, grazing or mowing.
Recently disturbed can mean disturbed yesterday, or 10 years ago. Most of undisturbed/climax vegetation is on preserves or hard to access parcels of land.

0 - Successional and climax vegetation
1 - Recently disturbed/successional

2 - Undisturbed/climax

0 - All structure classes
1 - Sparsely vegetated; 60-90 bare ground
2 - Grassland, forbs; 0-10 shrub or tree cover
3 - Shrub savannah; 11-25 shrub cover
4 - Shrubland; >26 shrub cover
5 - Tree savannah; 11-25 tree cover

7) Deciduous (including hardwoods, such as Madrona that are evergreen)

Forest classes: dbh (diameter at breast height) measured 4.5' from the ground with a special tape measure. The circumference can be measured using a standard measuring tape. Take the measurement at the same height (4.5' from the ground) as you would a dbh.

The following codes are used for the Deciduous, Deciduous/Conifer mix and Conifer classes:

0 - All structure classes
0 - All age/size classes
1 - Saplings (1-4" dbh (3-14" circumference), 15-30' tall)
2 - Pole (5-15" dbh (15-47" circumference), >30' tall)
3*- Small saw (15-20" dbh (48-63" circumference)
4*- Large saw (20-30" dbh (64-94" circumference)
5*- Old Growth: defined primarily by structure 2 or more layers, dominant trees generally >30" dbh on the westside.
6 - Young forests; mostly sapling or pole, possibly including seedlings
7 - Intermediate aged forests; mostly pole or small saw, may include variable aged forests.
8 - Mature to 'over-mature' forests; mostly saw timber to old-growth, may include mature forests of smaller stunted trees, such as some subalpine forests.

To estimate canopy closure, look at the ground and estimate shaded percentage. Walk or look into the forest to estimate canopy closure. The best time to test is when the sun is overhead, about midday.

0 - Open and closed canopy
1 - Open; 26-60% canopy closure
2 - Closed; 60-100% canopy closure
* - These would be homogenous stands. The trees would be about the same size and height.

8) Deciduous/Conifer mix

Forest classes: dbh (diameter at breast height) measured 4.5' from the ground with a special tape measure. The circumference can be measured using a standard measuring tape. Take the measurement at the same height (4.5' from the ground) as you would a dbh.

The following codes are used for the Deciduous, Deciduous/Conifer mix and Conifer classes:

0 - All structure classes
0 - All age/size classes
1 - Saplings (1-4" dbh (3-14" circumference), 15-30' tall)
2 - Pole (5-15" dbh (15-47" circumference). >30' tall)
3*- Small saw (15-20" dbh (48-63" circumference)
4*- Large saw (20-30" dbh (64-94" circumference)
5*- Old Growth: defined primarily by structure 2 or more layers, dominant trees generally >30" dbh on the westside.
6 - Young forests; mostly sapling or pole, possibly including seedlings
7 - Intermediate aged forests: mostly pole or small saw. may include variable aged forests.
8 - Mature to over-mature forests; mostly saw umber to old-growth, may include mature forests of smaller stunted trees, such as some subalpine forests.

To estimate canopy closure, look at the ground and estimate shaded percentage. Walk or look into the forest to estimate canopy closure. The best time to test is when the sun is overhead, about midday.

0 - Open and closed canopy
1 - Open; 26-60 canopy closure
2 - Closed; 60-100 canopy closure
* - These would be homogenous stands. The trees would be about the same size and height.

9) Conifer

Forest classes: dbh (diameter at breast height) measured 4.5' from the ground with a special tape measure. The circumference can be measured using a standard measuring tape. Take the measurement at the same height (4.5' from die ground) as you would a dbh.
The following codes are used for the Deciduous, Deciduous/Conifer mix and Conifer classes:

0 - All structure classes
0 - All age/size classes
1 - Saplings (1-4" dbh (3-14" circumference), 15-30' tall)
2 - Pole (5-15" dbh (15-47" circumference), >30' tall)
3*- Small saw (15-20" dbh (48-63" circumference)
4*- Large saw (20-30" dbh (64-94" circumference)
5*- Old Growth: defined primarily by structure 2 or more layers, dominant trees generally >30" dbh on the westside.
6 - Young forests; mostly sapling or pole, possibly including seedlings
7 - Intermediate aged forests; mostly pole or small saw, may include variable aged forests.
8 - Mature to 'over-mature' forests; mostly saw timber to old-growth, may include mature forests of smaller stunted trees, such as some subalpine forests.

To estimate canopy closure, look at the ground and estimate shaded percentage. Walk or look into the forest to estimate canopy closure. The best time to test is when the sun is overhead, about midday.

0 - Open and closed canopy
1 - Open; 26-60 canopy closure
2 - Closed; 60-100 canopy closure

* - These would be homogenous stands. The trees would be about the same size and height.

Note: The Non-forest and Forest classes may be the most difficult to label. Many professionals can go to the same site and disagree on the classification. Do your best and be consistent using the classes. Label the habitat based on a good sample (i.e. away from the path or edge of a forest) that best describes the habitat. Remember, vegetation is constantly growing, so classes may change within a couple of years.
Urban areas with a lot of large trees are not forests.